

## **NDSC Publications – 1991**

*Updated 4/15/2020*

1991, Carswell, A. I.

S. R. Pal, W. Steinbrecht, J. A. Whiteway, A. Ulitsky, and T. Y. Wang

Lidar Measurements of the Middle Atmosphere

Can. J. Phys., 69, 1076-1086

Lidar

1991, Cunnold, D.M.

J.M. Zawodny, W.P. Chu, J.P. Pommereau, F. Goutail, J. Lenoble, M.P. McCormick, R.E. Veiga, D.

Murcray, N. Iwagami, K. Shibasaki, P.C. Simon, and W. Peetermans

Validation of SAGE II NO<sub>2</sub> Measurements

J. Geophys. Res., 96, 12913-12925

Satellite; NO<sub>2</sub>; Validation

1991, De Backer, H.

De Muer

Intercomparison of total ozone data measured with Dobson and Brewer ozone spectrophotometers at Uccle (Belgium) from January 1984 to March 1991, including zenith sky observations

J. Geophys. Res., 96, 20711-20719

Brewer; Dobson; Ozone

1991, Demoulin, Ph.

C. B. Farmer, C. P. Rinsland, and R. Zander

Determination of absolute strengths of N<sub>2</sub> quadrupole lines from high resolution ground based IR solar observations

J. Geophys. Res., 96, 13,003-13,008

FTIR; N<sub>2</sub>

1991, Deshler, T.

D. J. Hofmann

Ozone profiles at McMurdo Station, Antarctica, the austral spring of 1990

Geophys. Res. Lett., 18, 657-660

Sonde; Ozone

1991, Ehhalt, D. H.

U. Schmidt, R. Zander, Ph. Demoulin, and C. P. Rinsland

Seasonal cycle and secular trend of the total and tropospheric column abundance of ethane above the Jungfraujoeh

J. Geophys. Res., 96, 4985-4994

FTIR; C<sub>2</sub>H<sub>6</sub>

1991, Gobbi G.P.

T. Deshler, A. Adriani, and D.J. Hofmann

Evidence for denitrification in the 1990 Antarctic spring Stratosphere: I, Lidar and temperature measurements

Geophys. Res. Lett., 18, 1995-1998

Lidar; Temperature

1991, Hauchecorne A.

M.L. Chanin, P. Keckhut

Climatology and trends of the middle atmospheric temperature (33-87 km) as seen by Rayleigh lidar above south of France

J. Geophys. Res., 96, 15297-15309

Lidar; Temperature; Trends

1991, Jaeger, H.

D.J. Hofmann

Midlatitude lidar backscatter to mass, area and extinction conversion model based on insitu aerosol measurements from 1980 to 1987

Appl. Opt., 30, 127-138

Lidar; Aerosol

1991, Kaye, J. A.

A. R. Douglas, C. H. Jackman, R. S. Stolarski, R. Zander, and G. Roland

Two-dimensional model calculations of fluorine-containing reservoir species in the stratosphere

J. Geophys. Res., 96, 12,865-12,881

FTIR; F<sub>2</sub>

1991, Keys, J.G.

Gardiner, B.G.,

NO<sub>2</sub> overnight decay and layer height at Halley Bay, Antarctica

Geophys. Res. Lett., 18, 665-668

FTIR; NO<sub>2</sub>

1991, McDermid, I. S.

D. A. Haner, M. M. Kleiman, T. D. Walsh and M. L. White

Differential Absorption Lidar Systems at JPL-TMF for Tropospheric and Stratospheric Ozone Measurements

Opt. Engineer., 30, 22-30

Lidar; Ozone

1991, McGee, T. J.

D. Whiteman, R. Ferrare, J. J. Butler, and J. F. Burris

STROZ LITE: NASA Goddard Stratospheric Ozone Lidar Trailer Experiment

Opt. Engineer., 30, 31-39

Lidar; Ozone

1991, McKenzie, R. L.

Application of a simple model to calculate latitudinal and hemispheric differences in ultraviolet radiation

Weather and Climate, 3-14

Spectral UV; UV Irradiance

1991, McKenzie, R. L.

P. V. Johnston., C. T. McElroy, J. B. Kerr, and S. Solomon

Altitude distributions of stratospheric constituents from ground-based measurements at twilight

J. Geophys. Res., 96, 15499-15511

UVVis

1991, McKenzie, R. L.

W. A. Matthews, and P. V. Johnston

The relationship between erythemal UV and ozone derived from spectral irradiance measurements

Geophys. Res. Lett., 18, 2269-2272

Spectral UV; Erythemal UV

1991, Nichol, S.E.

S. Coulmann, and T.S. Clarkson

Relationship of springtime ozone depletion at Arrival Heights, Antarctica to the 70 hPa temperatures,

Geophys. Res. Lett., 18, 1865-68

Dobson; Ozone

1991, Rinsland, C. P.

Zander R., and Demoulin, P.

Ground-Based Infrared Measurements of HNO<sub>3</sub> Total Column Abundances: Long-Term Trend and Variability

J. Geophys. Res., 96, 9379-9389

FTIR; HNO<sub>3</sub>

1991, Rinsland, C. P.

R. Zander, A. Goldman, F. J. Murcray, D. G. Murcray, M. R. Gunson, and C. B. Farmer

The fundamental quadrupole band of <sup>14</sup>N<sub>2</sub>: line positions from high-resolution stratospheric solar absorption spectra

J. Mol. Spectrosc., 148, 274-279

FTIR

1991, Rosen, J.M.  
N.T.Kjome, S.J. Oltmans  
Balloon borne observations of backscatter, frost point and ozone in polar stratospheric clouds at the South Pole  
Geophys. Res. Lett.,18, 171-174  
Sonde; Aerosol; H2O; Ozone; PSC

1991, Rosen, J.M.  
N.T.Kjome  
The Backscattersonde: a new instrument for atmospheric aerosol research  
Appl. Opt., 30, 1552-1561  
Sonde; Aerosol

1991, Staehelin J.  
Schmid W.  
Trend Analysis of the tropospheric ozone concentration utilizing the 20-years data set of the ozone balloon soundings over Payerne  
Atmos. Env., 25A, 1739-1749  
Sonde, Ozone; Trends

1991, Stamnes, K.  
J. Slusser and M. Bowen, Derivation of total ozone abundance and cloud effects from spectral irradiance measurements  
Appl. Opt., 30, 30, 1991  
UVVis; Ozone; Cloud

1991, Stefanutti L  
M. Morandi, M. Del Guasta, S. Godin, G. Megie, J. Brechet and J. Picquard  
Polar stratospheric clouds observations over the Antarctic continent at Dumont d'Urville  
J. Geophys. Res., 96, 12975-12987  
Lidar; Aerosol, PSC

1991, Toon, G.C.  
The JPL MkIV Interferometer  
Optics and Photonics News, 2, 19-21  
FTIR

1991, Zander, R.  
C. P. Rinsland, and Ph. Demoulin  
Infrared spectroscopic measurements of the vertical column abundance of sulfur hexafluoride, SF<sub>6</sub>, from the ground

J. Geophys. Res., 96, 15,447-15,454  
FTIR; SF6

1991, Zander, R.

C. P. Rinsland, D. H. Ehhalt, J. Rudolph, and Ph. Demoulin

Vertical column abundances and seasonal cycle of acetylene, C<sub>2</sub>H<sub>2</sub>, above the Jungfraujoch station,  
derived from IR solar observations

J. Atmos. Chem., 13, 359-372

FTIR; C<sub>2</sub>H<sub>2</sub>